

Application No.: 10/703,390
Applicant: van den Brink et al.
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Amendments to the Drawings:

The Figures 2 and 3 on attached replacement sheets 1/3 and 2/3 have been changed. In Figure 2 previously omitted means for feeding fluid has been added. In Figure 3 previously omitted means for feeding fluid has been added. No new matter is introduced with these amendments.

Attachment: Replacement Sheet 1/3 and 2/3.

Annotated Sheet Showing Changes 1/3 and 2/3.

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Remarks/Arguments:

Introduction

Claims 1-16 are pending in the application. Claims 14-16 have been withdrawn in response to a restriction requirement. Claims 1, 11 and 13 have been amended. No new matter has been introduced.

Drawings

The drawings were objected to 35 under 37 CFR 1.83(a) as allegedly not showing the means for feeding a fluid via the fourth channel. The means for feeding fluid via the fourth channel is described in the specification at par.[0031], [0063] – [0065]. The means for feeding fluid via the fourth channel 16 has been added to Figures 2 and 3 of Replacement Sheet 1/3 and 2/3. No new matter is introduced with these amendments.

Reconsideration and withdrawal of the objection to the drawings is respectfully requested.

Section 112 Rejections

Claim 10 has been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the with the written description requirement. Specifically, the Examiner states that there is no basis in the text for the subject matter of claim 10, being “means for feeding a fluid via the

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fourth channel". However, paragraph [0031] and paragraphs [0063] to [0065], both mention the feeding of fluid through the fourth channel, for example, for diluting purging purposes. It is mentioned that this can be achieved by providing a fluid communication with a pressurized source of, for example, an inert fluid such as N₂.

Claims 1-13 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being unclear for failing to particularly point out and distinctly claim the subject matter. Specifically, the Examiner alleges that the phrase of claim 1, "first channel having a wall, a first channel opening, opening a first face of base block, and a second channel opening, opening in a second face of the base block", is not clear with respect to the number of openings that is present. The Examiner alleges that with this wording it can either be 2 or 4 openings that is present.

Applicants respectfully submit that the claim amendments presented herein obviate the Section 112 concerns. The Examiner objected to claims 11 and 13 as allegedly being unclear. Applicants respectfully submit that the amendments presented herein obviate the Section 112 concerns. Reconsideration and withdrawal of the Section 112 claim rejections are respectfully requested.

Section 102 Rejections

Claims 1, 3-6 and 10-13 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,709,840 to Juranas (hereinafter "Juranas"). Applicant respectfully traverses.

Claim 1 discloses a system for performing experiments, in particular for high throughput experimentation. The system includes at least one tubular vessel having a first vessel opening and a second vessel opening at opposite ends thereof allowing a flow of fluid through the vessel; and an assembly for housing said vessel. The assembly includes a base block having at least one first channel formed therein for removably housing the vessel, the first channel having a wall, a first channel opening, opening in a first face of the base block, and a second channel opening, opening in a second face of the base block. The first and second channel openings of the first channel allows for introduction and/or discharge of a fluid into and from the first channel. A cover element has a bottom surface and the cover element with the bottom surface facing the base block is releasably attachable to the first face of the base blocks. A first sealing element between the first face of the base block and the bottom surface of the cover element surrounds the first channel opening completely, and thereby sealing gastight around the first channel opening between the cover element and the base block. The tubular vessel and the first channel are such that an annular gap is present between the outside of the vessel and the wall of the first channel. A second sealing element is located in the first channel, the second sealing element

sealing gastight against the wall of the first channel and the outside of the vessel thereby sealing the annular gap. A fourth channel is provided in the base block, which fourth channel opens into the gap between the second sealing element and the second channel opening.

According to the Examiner, Juranas discloses:

- a housing 10,
- sealing members 50, 52 ("first and second sealing elements")
- tubular through vessels 76,78
- channel 16 ("first channel")
- channel 18 ("fourth channel")
- channel 72 ("second channel")
- channel 62 ("third channel")
- plug 60 ("cover")

In general, Juranas discloses a batch reactor, contrary to claim 1 of the application in which a flow through reactor is claimed. In Juranas, the reactor is connected to a reactor block, instead of the reactor being located in a channel in the reactor block.

In Juranas, the tubes 76 and 78 are not used as reaction vessels, but as hollow needles to add a substance to the reactor prior to the start of the reaction and/or to remove a substance from the reactor after the reaction has been completed.

Even if, *in arguendo*, we assume that tubes 76 and 78 are tubular vessels as recited in the claims of the application, then still the other elements of the Juranas disclosure do not fit in. For example, the first channel 16 is only present around tube 76. Therefore, tube 78 cannot qualify as a tubular vessel as recited in claim 1. Then, channel 18 cannot be regarded as the fourth channel, as it does not open into the gap between the second sealing element (reference numeral 50 according to the Examiner) and the second channel opening (the Examiner regarding channel 72 as the second channel).

Furthermore, the function of the second channel is to feed a fluid (preferably a gas) into the tubular vessel. The fluid present in channel 72 of Juranas cannot enter into the hollow needle 76. Therefore, channel 72 of Juranas cannot be regarded as a second channel as recited in the claims.

Channel 62 in Juranas cannot be used to feed liquid in tube 76 or 78. Therefore, channel 62 cannot be regarded as a third channel as recited in the claims.

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According to claim 1 of the application, the fourth channel opens into the gap between the second sealing element and the second channel opening. Channel 18 of Juranas cannot be regarded as the fourth channel, as it does not open into the gap between the second sealing element (reference numeral 50 according to the Examiner) and the second channel opening (the Examiner regarding channel 72 as the second channel).

The reactor flask according to the Juranas document has a different setup than the system as recited in the claims. In the Juranas reactor flask, the reaction takes place in the conical reactor vessel 30. There is no disclosure whatsoever that this reactor vessel is placed in a reactor block and that there are channels provided within the reactor block to supply fluids to an annular gap which extends outside the reactor vessel and inside the reactor block.

A rejection under 102 requires that each and every element is disclosed in the prior art document. Juranas fails to disclose each and every element as recited in the claims. Therefore, reconsideration and withdrawal of the rejection section 102 rejections are respectfully requested. Therefore, Juranas fails to disclose each and every limitation as currently recited in independent claim 1. Reconsideration and withdrawal of the rejection of claim 1, and all claims dependent therefrom, under 35 U.S.C § 102(b) are respectfully requested.

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Section 103 Rejections

Claims 2 and 7-9 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Juranas. Applicant respectfully traverses. The above- argument equally applies herein as claims 2 and 7-9 depend from claim 1. Juranas fails to teach or suggest the invention as recited in claim 1.

Accordingly, reconsideration and withdrawal of the rejection of claims 2 and 7-9 under 35 U.S.C. § 103(a) are respectfully requested.

Double Patenting Rejection

The claims are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 51, 70-71, and 73-78 of co-pending Application No. 10/477,030. Applicants traverse this rejection. The Examiner states that the conflicting claims are not identical. This is true because the co-pending Application No. 10/477,030 is directed to a total different invention, as it relates to the evaporation of any liquid that enters the reactor vessel. This is an issue that is totally different from the issue that is the subject of this application. It is respectfully submitted that the double patenting rejection be withdrawn.

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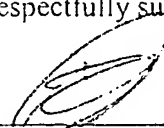
Summary

Therefore, Applicants respectfully submit that independent claim 1 and all claims dependent therefrom, are patentably distinct. This application is believed to be in condition for allowance. Favorable action thereon is therefore respectfully solicited.

Should the Examiner have any questions or comments concerning the above, the Examiner is respectfully invited to contact the undersigned attorney at the telephone number given below.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 08-2461. Such authorization includes authorization to charge fees for extensions of time, if any, under 37 C.F.R. § 1.17 and also should be treated as a constructive petition for an extension of time in this reply or any future reply pursuant to 37 C.F.R. § 1.136.

Respectfully submitted,



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A SYSTEM FOR PERFORMING EXPERIMENTS, IN PARTICULAR FOR HIGH THROUGHPUT EXPERIMENTATION

Inventor: van den Brink et al.

Docket No. 903-91 PCT/US/CIP

Annotated Sheet Showing Changes

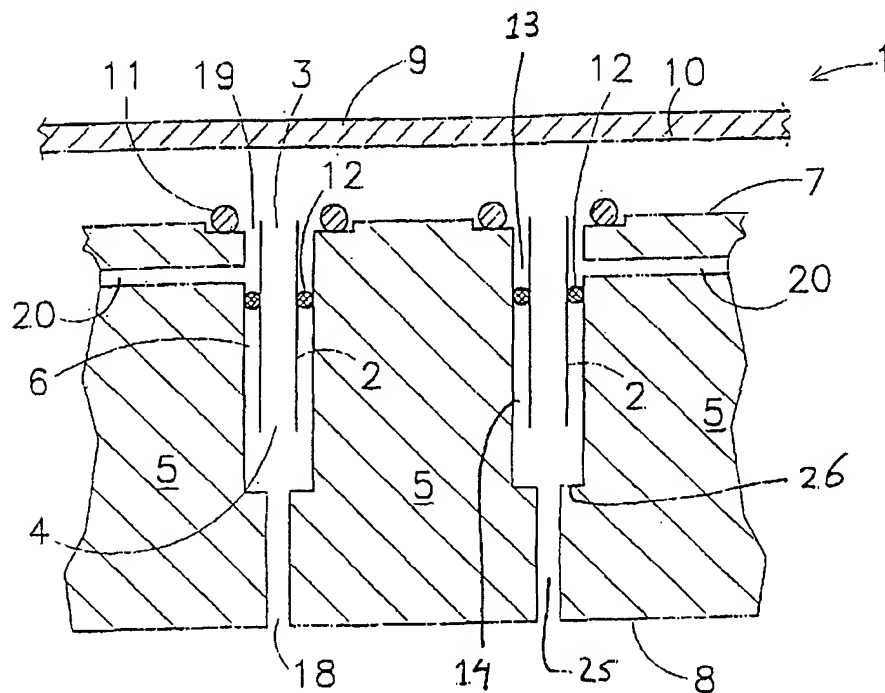


Fig 1

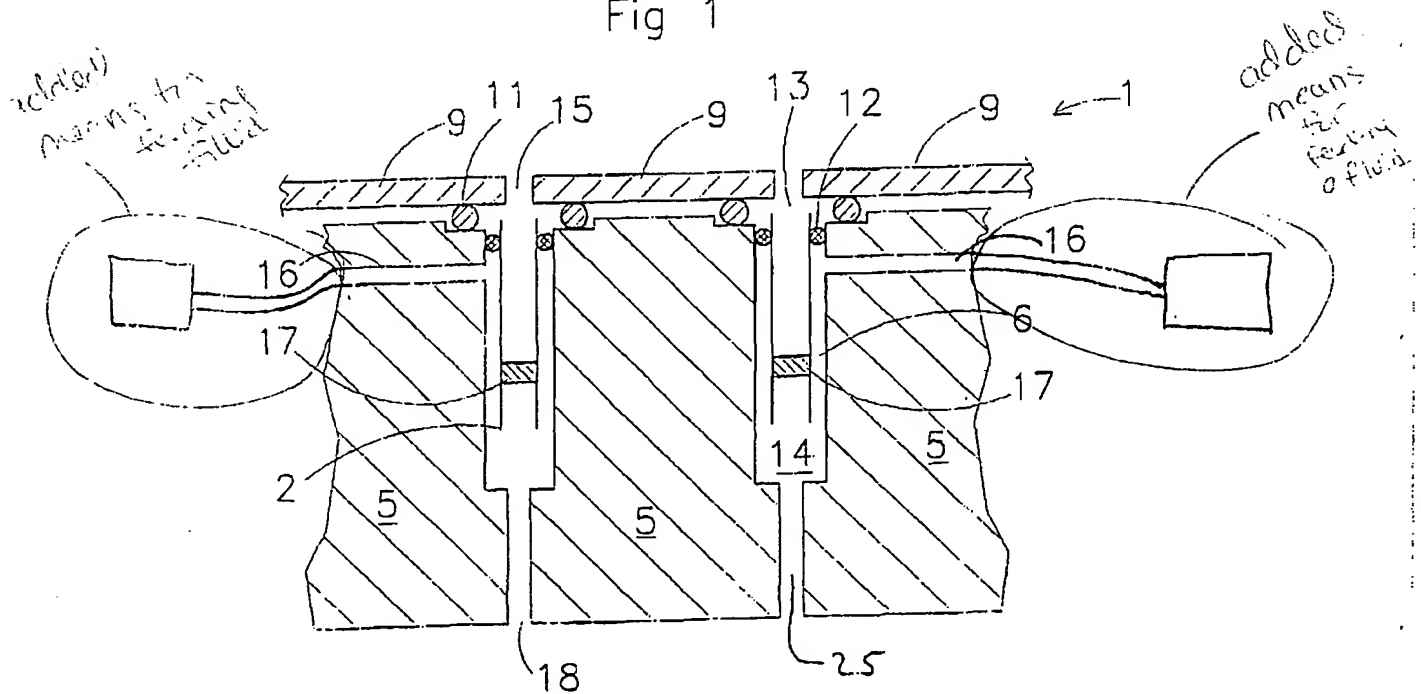


Fig 2

A SYSTEM FOR PERFORMING EXPERIMENTS, IN PARTICULAR FOR HIGH
THROUGHPUT EXPERIMENTATION

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Annotated Sheet Showing Changes

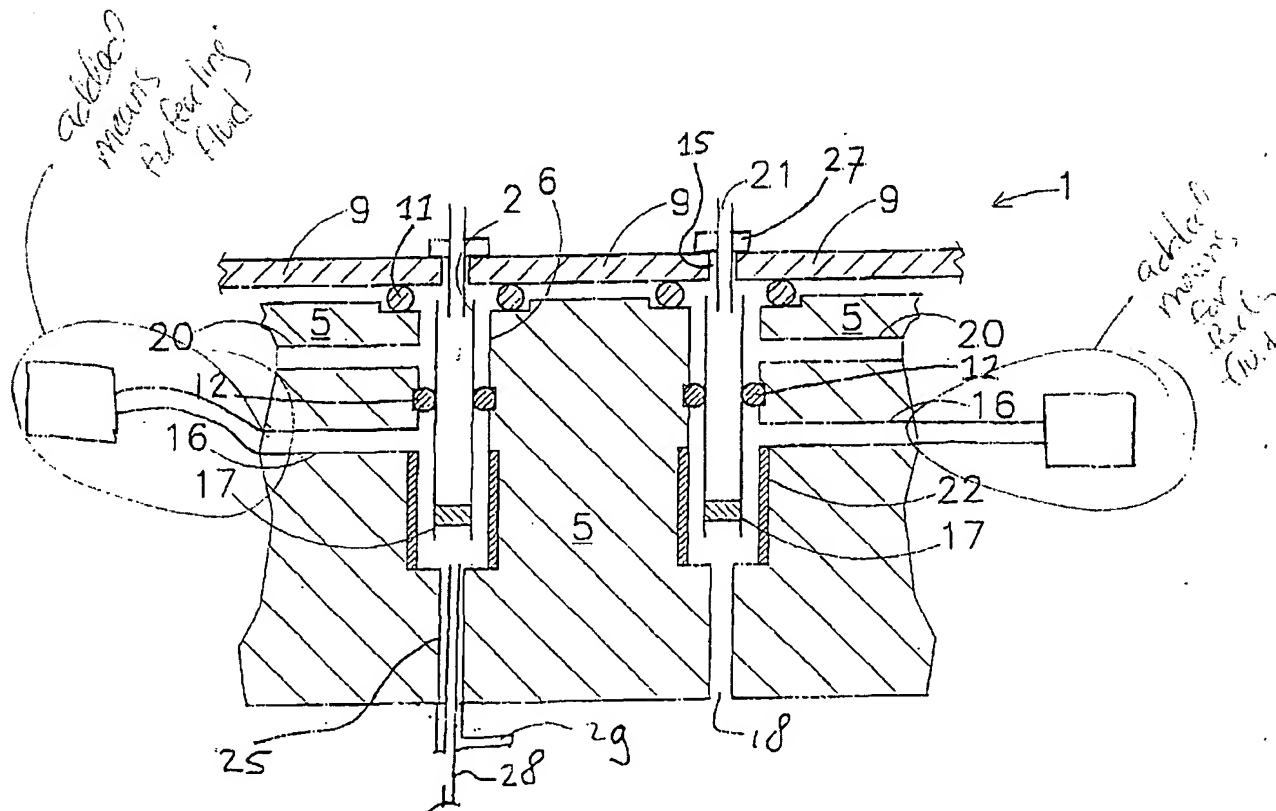


Fig 3